

Title (en)

MICROFLUIDIC CHIP AND ANALYTICAL INSTRUMENT PROVIDED WITH MICROFLUIDIC CHIP

Title (de)

MIKROFLUIDISCHER CHIP UND ANALYSEGERÄT MIT MIKROFLUIDISCHEM CHIP

Title (fr)

PUCE MICROFLUIDIQUE ET INSTRUMENT ANALYTIQUE COMPORTANT UNE PUCE MICROFLUIDIQUE

Publication

**EP 3779435 A4 20210428 (EN)**

Application

**EP 19792300 A 20190219**

Priority

- CN 201820621664 U 20180427
- CN 2019075460 W 20190219

Abstract (en)

[origin: EP3779435A1] The present invention discloses a micro-fluidic chip, comprising a chip main body, a sample inlet, a liquid driving force inlet, a main fluid channel and multiple functional chambers provided on the chip main body. The micro-fluidic chip of the present invention identifies, positions and quantifies a liquid by means of a specific liquid quantification chamber, thereby decreasing chip manufacturing process difficulty, and increasing quantification accuracy.

IPC 8 full level

**G01N 33/50** (2006.01); **B01L 3/00** (2006.01); **C12M 1/00** (2006.01); **G01N 33/543** (2006.01); **G01N 35/10** (2006.01)

CPC (source: EP US)

**B01L 3/00** (2013.01 - EP); **B01L 3/50273** (2013.01 - US); **G01N 33/50** (2013.01 - EP US); **G01N 33/54366** (2013.01 - EP);  
**G01N 35/00** (2013.01 - EP); **B01L 2200/027** (2013.01 - US); **B01L 2200/146** (2013.01 - US); **B01L 2300/0636** (2013.01 - US);  
**G01N 2035/00237** (2013.01 - EP)

Citation (search report)

- [I] US 2005161327 A1 20050728 - PALMIERI MICHELE [IT]
- [I] WO 2007092618 A2 20070816 - DEKA PRODUCTS LP [US], et al
- [I] WO 2013086509 A1 20130613 - UNIV DUKE [US]
- [I] WO 2013177953 A1 20131205 - CAPITALBIO CORP [CN], et al
- [I] RU 2612904 C1 20170313 - TONEVITSKIJ EVGENIJ ALEKSANDROVICH [RU]
- [I] JP 2010065584 A 20100325 - AIDA ENG LTD
- [I] EP 3308860 A1 20180418 - ILLUMINA INC [US], et al
- [X] VERONICA BETANCUR ET AL: "Integrated Lateral Flow Device for Flow Control with Blood Separation and Biosensing", MICROMACHINES, vol. 8, no. 12, 20 December 2017 (2017-12-20), pages 367, XP055439595, DOI: 10.3390/mi8120367
- [XI] D. D. MAMAEV ET AL: "Method for automated extraction and purification of nucleic acids and its implementation in microfluidic system", APPLIED BIOCHEMISTRY AND MICROBIOLOGY, vol. 47, no. 2, 1 March 2011 (2011-03-01), US, pages 211 - 220, XP055476599, ISSN: 0003-6838, DOI: 10.1134/S0003683811020128
- See references of WO 2019205780A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3779435 A1 20210217; EP 3779435 A4 20210428;** CN 208224274 U 20181211; US 2021123903 A1 20210429;  
WO 2019205780 A1 20191031

DOCDB simple family (application)

**EP 19792300 A 20190219;** CN 201820621664 U 20180427; CN 2019075460 W 20190219; US 201917051172 A 20190219